

Amendments to the Claims

The following listing of claims will replace all prior versions, and listings, of claims in the above-identified patent application.

Listing of Claims

1. (currently amended) A label, said label comprising:
 - a substrate having a first side and a second side;
 - an indicium located on said substrate;
 - said indicium comprising at least two different emissivity values that are configured to encode said indicium with information;
 - a thermally conductive layer located on said first side of said substrate, wherein said thermally conductive layer ensures that a detected difference in surface temperature corresponds with a difference in said emissivity values; and
 - a background layer located on said first side of said substrate.
2. (original) The label of claim 1 wherein said indicium is applied to said first side of said substrate.
3. (previously presented) The label of claim 1 wherein said substrate is part of a product to which said label is applied.
4. (original) The label of claim 1 wherein said substrate is applied individually to a product.

5. (original) The label of claim 1 wherein said thermally conductive layer is applied individually to a product.

6. (original) The label of claim 1 wherein said background layer is applied individually to a product.

7. (original) The label of claim 1 wherein said indicium is an information-encoding indicium.

8. (original) The label of claim 1 wherein said indicium is a human readable character.

9. (original) The label of claim 1 wherein said indicium is used to provide postage paid information.

10. (original) The label of claim 1 wherein said indicium is used to authenticate the manufacturer of a product.

11. (currently amended) A label comprising:
a substrate having a first side and a second side;
a thermally conductive layer located on said first side of said substrate, wherein said thermally conductive layer ensures that a detected difference in surface temperature corresponds with a difference in said emissivity values;

a background layer located on said first side of said substrate;

a first pattern having a first emissivity value at a given range of wavelengths; and

a second pattern having a second emissivity value at said given range of wavelengths, said first and second patterns that combine to form a sequence of differential emissivity values at said given range of wavelengths.

12. (original) The label of claim 1 wherein said indicium is applied on top of said background layer.

13. (original) The label of claim 12 wherein the optical properties of said indicium are substantially similar to the optical properties of said background layer.

14. (original) The label of claim 1 further comprising an adhesive layer superposed on said second side of said substrate.

15. (original) The label of claim 1 wherein said substrate is made from paper.

16. (original) The label of claim 1 wherein said substrate is made from plastic.

17. (original) The label of claim 1 wherein said substrate is made from tyvec.

18. (original) The label of claim 1 wherein said substrate is made from a metallic material.

19. (original) The label of claim 1 wherein said thermally conductive layer is made from a metallic foil.

20. (original) The label of claim 1 wherein said thermally conductive layer is made from a layer of metallic ink.

21. (original) The label of claim 1 wherein said thermally conductive layer is transparent.

22. (original) The label of claim 21 wherein said thermally conductive layer is applied on top of said indicium.

23. (currently amended) A label comprising:
a substrate having a first side and a second side;
an indicium, located on said substrate, comprising at least two different emissivity values that are configured to encode said indicium with information; and

a thermally conductive layer located on said first side of said substrate, wherein said thermally conductive layer ensures that a detected difference in surface temperature corresponds with a difference in said emissivity values, and wherein said indicium is not distinguishable by the naked eye from the remainder of said label.

24. (original) The label of claim 23 wherein the optical properties of said indicium are substantially similar to the optical properties of said substrate.

25. (original) The label of claim 23 wherein the optical properties of said indicium are substantially similar to the optical properties of said thermally conductive layer.

26. (canceled)

27. (canceled)

28. (canceled)

29. (currently amended) A label for use with a product, said label comprising:

a substrate having a first side and a second side, said substrate is part of said product;

an indicium, located on said substrate, comprising at least two different emissivity values that are configured to encode said indicium with information;

a thermally conductive layer that is applied to said first side of said substrate, wherein said thermally conductive layer ensures that a detected difference in surface temperature corresponds with a difference in said emissivity values; and

a background layer that is applied to said first side of said substrate.

30. (currently amended) A method for producing a label, said method comprising:

providing a substrate having a first side and a second side;

locating an indicium on said substrate, said indicium comprising at least two different emissivity values that are configured to encode said indicium with information;

applying a thermally conductive layer to said first side of said substrate to ensure that a detected difference in surface temperature corresponds with a difference in said emissivity values; and

applying a background layer to said first side of said substrate.

31. (original) The method of claim 30 wherein said providing comprises applying said substrate to the surface of a product that is to receive said label.

32. (original) The method of claim 30 wherein said providing comprises using a portion of a product that is to receive said label as said substrate.

33. (original) The method of claim 30 wherein said applying a thermally conductive layer does not occur substantially simultaneously to said applying a background layer.

34. (previously presented) The method of claim 30 wherein said applying said thermally conductive layer occurs substantially simultaneously to said applying said background layer.

35. (canceled)

36. (canceled)

37. (canceled)

38. (canceled)

39. (canceled)